

## ABSTRACT

In a method of separating acoustic signals from a plurality of sound sources comprising the following steps: disposing two microphones (MIK1, MIK2) at a predefined distance ( $d$ ) from one another; picking up the acoustic signals with both microphones (MIK1, MIK2) and generating associated microphone signals ( $m_1$ ,  $m_2$ ); and separating the acoustic signal of one of the sound sources ( $S_1$ ) from the acoustic signals of the other sound sources ( $S_2$ ) on the basis of the microphone output signals ( $m_1$ ,  $m_2$ ), the proposed separation step comprises the following steps: applying a Fourier transform to the microphone output signals in order to determine their frequency spectra ( $M_1$ ,  $M_2$ ); determining the phase difference between the two microphone output signals ( $m_1$ ,  $m_2$ ) for every frequency component of their frequency spectra ( $M_1$ ,  $M_2$ ); determining the angle of incidence of every acoustic signal allocated to a frequency of the frequency spectra ( $M_1$ ,  $M_2$ ) on the basis of the relative phase angle and the frequency; generating a signal spectrum ( $S$ ) of a signal to be output by correlating one of the two frequency spectra ( $M_1$ ,  $M_2$ ) with a filter function which is selected so that acoustic signals from an area around a preferred angle of incidence are amplified relative to acoustic signals from outside this area; and applying an inverse Fourier transform to the resultant signal spectrum.